

MEMORANDUM

TO: RON ROBINSON

DATE: January 28, 1972

FROM: RON PINE

SUBJECT: E.I. DuPont and Sequallitchew Creek

The above study was conducted on December 28, 1971. The objective of the study was to determine the effect of the DuPont operation upon the water quality of Sequallitchew Creek.

Samples were collected from Sequallitchew Creek at the stations shown on Figure 1 and the results are presented in Table 1. A 24-hour composite sample was collected from the acid plant effluent as shown in Figure 1. The acid plant discharges into a sink from which there is no surface outlet. The discharge into Sequallitchew Creek is from the plant water supply overflow and seepage from the ammonia dehydrator.

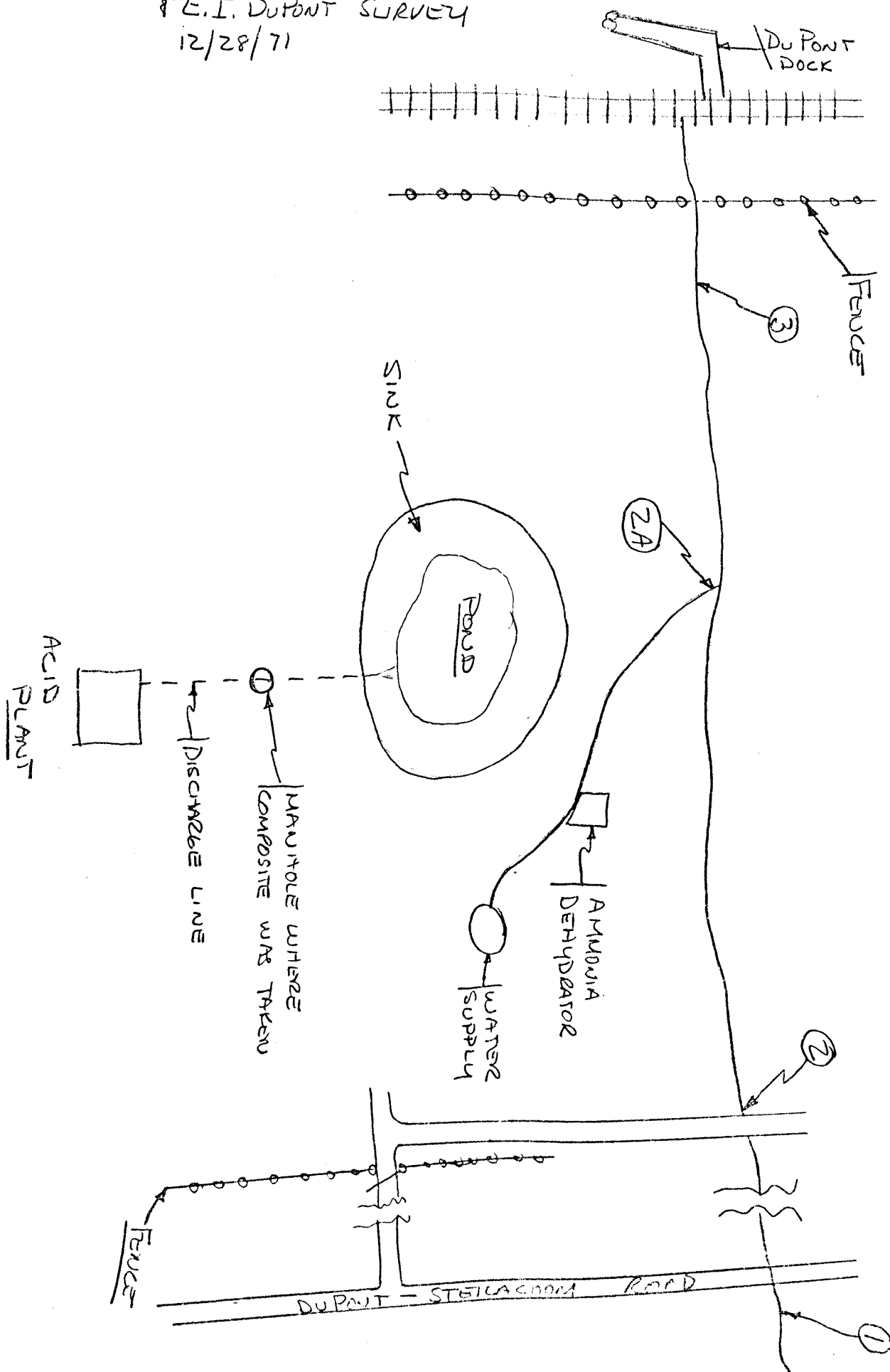
The analytical results of the composite sample from the acid plant is as follows:

pH	6.8
Chloride	218 mg/l
Alkalinity as CaCO ₃	34 mg/l
BOD ₅	N11
COD	7.0
Total Coliform	1,750 colonies/100 mls
T.S.	589 mg/l
T.N.V.S.	449 mg/l
T.S.S.	2 mg/l
T.S.N.V.S.	1 mg/l
T.S.V.S.	1 mg/l
T-PO ₄	0.69 mg/l
Organic Kjel.-N	0.02 mg/l
NO ₂ -N	0.05 mg/l
NO ₃ -N	4.88 mg/l
NH ₃ -N	0.00 mg/l

Discussion

The water entering Sequallitchew Creek from the ammonia dehydrator (Station 2A) is high in nitrate-nitrogen, ammonia and total solids; however, its effect upon the creek at Station 3 is barely discernible. A biological evaluation of the creek showed a substantial number and variety of aquatic invertebrates both above and below the discharge. This further indicates that there is little or no effect from the discharge since these organisms are continually subjected to its influence.

FIGURE 1. SEQUALLECUM CREEK
PUGET
E.I. DUPONT SURVEY
12/28/71



MEMORANDUM
Department of Ecology
P. O. Box 829
OLYMPIA, WASHINGTON
98501

Information
For Action
Permit
Other

Check

TO: Mike & Files & Pete Hildebrandt

DATE: October 6, 1971

FROM: *Ron*
Ron Robinson

SUBJECT: E. I. Du Pont - Pierce County - Sampling

We would like to have sampling done at E. I. Du Pont de Nemours & Co. at Du Pont, Washington.

Samples of the effluent and the receiving water above and below the discharge point will be necessary. The receiving water is Sequallitchew Creek which begins at Lake Sequallitchew and it would be good to sample the lake also. Analysis for Temperature, pH, bacterial count, ammonia, nitrate, phosphorus, alkalinity, COD, TDS, and volatile solids at each location.

Contact H. D. Means, Mgr. or Stanley E. Bye, Tech. Engineer at (206) JU 4-1616 for setting up a visit. You must have prior appointment to get through the gate. They will be expecting a call from you. The above information is needed for writing a permit.

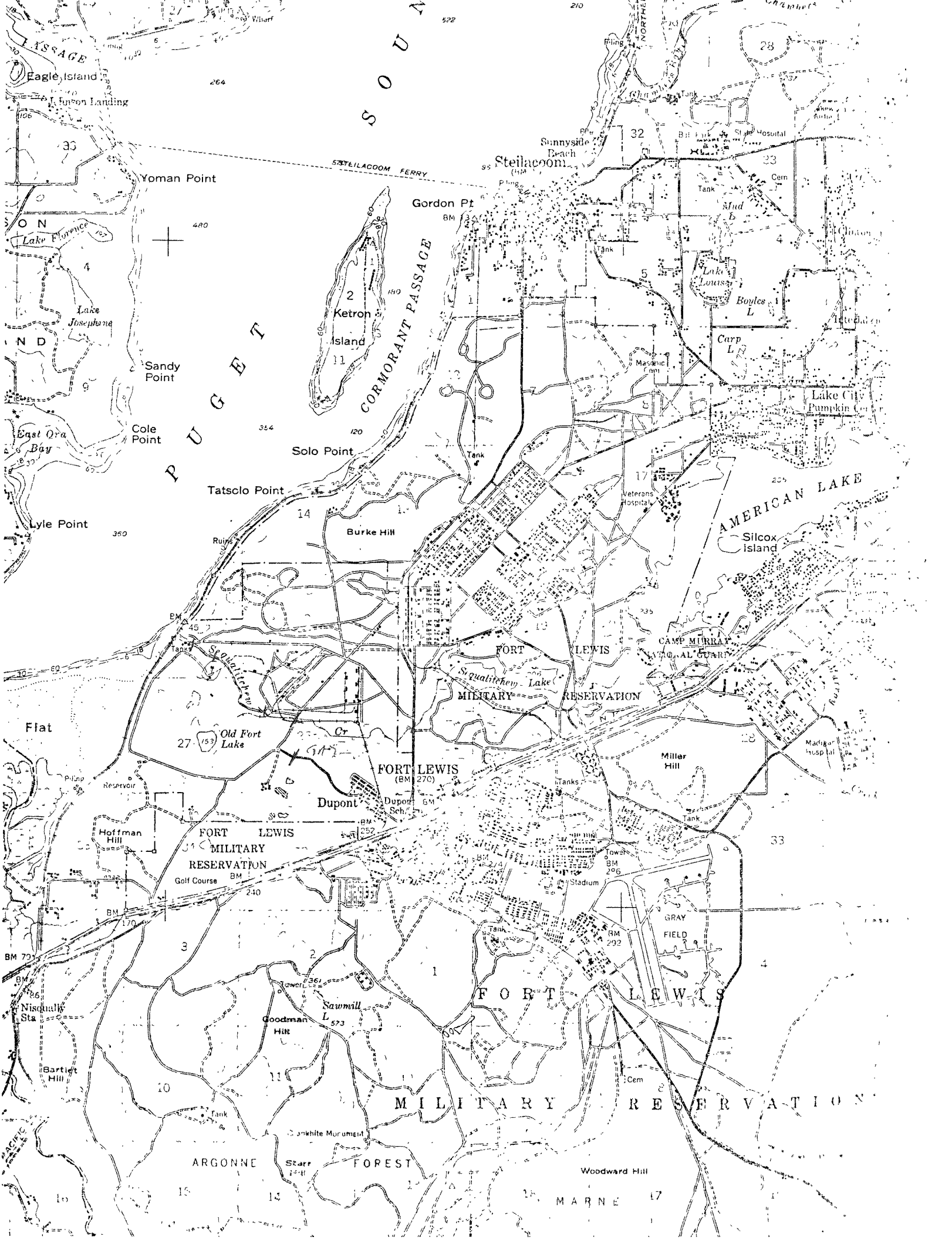
Please contact me or Mike Price if additional information is needed. No boat is needed but possibly boots for wading the creek.

Lake Sequallitchew is on Fort Lewis property and is west of the south end of American Lake. Contact with Fort Lewis to sample it may be necessary.

RSR:dlb
10-13-71

A.C. "TONY" URSIC -
TUES. 28TH

JACK MINOR



REQUEST FOR ANALYSIS

Date 12/20/71

REQUESTED BY Row Pine

RECEIVING WATER SEQUALITON CR

COLLECTED BY Row Pine & Norm Thomas

PROCESS WATER _____

DATE ~~WERE~~ (WILL BE) COLLECTED 12/28/71

OTHER _____

PRIORITY: REASONABLY SOON _____ AS SOON AS POSSIBLE X EMERGENCY _____

SAMPLES WILL ARRIVE: DATE 12/28/71 APPROXIMATE TIME 4 PM CARRIER CR

ROUTE DATA SUMMARY TO: Row Pine

ADDITIONAL INFORMATION (PROBLEM, BACKGROUND, INTERFERENCES, PATTERNS, ETC.)

Information is needed for a new permit.

For Lab Use Only

Type of Analyses Required	Number of Samples	Approx. Range	Preservative Type - Vol.	Laboratory Number	Analyst	Date	Notes
BOD ₅	6		Iced				
COD	6						
Chloride	6						
Alkalinity	6						
Total Coliform	6						
NH ₃ -N	6		Mercuric Chloride				
NO ₃ -N	6						
NO ₂ -N	6						
K-N	6						
T-PO ₄	6						
TS	6		Iced				
TNVS	6						
TSS	6						
TSNVS	6						
TSVS							
TOTAL							

Fill out as completely as possible. Some Analyses (bacteriological, biological, BOD, etc.) and large numbers of samples should be scheduled ahead of time. Specific questions should be directed to the Analyst supervising the particular analysis desired. Lab. phone: 206-753-2362.

ANALYTICAL REPORT SHEET

To: Ron Pine

Roa Pine

Merlev McCall

The following are the analytical results from survey conducted at:

Dupont

03-02.23

Collected 12/21/71

[illegible]

Notes:

Summarized by

Date 1/15/72

STATE OF WASHINGTON

Routing

DEPARTMENT OF ECOLOGY

OFFICE OF TECHNICAL SERVICES

Original to LABORATORY

ANALYTICAL REPORT SHEET

Copies to:

Ron PineTo: Ron PineMerley McCall

The following are the analytical results from survey conducted at:

Sequallitchew Creek03-02-21Collected 12/28/71

LAB. NO.	STATION NO.	pH	ppm Chlorides	ppm as CaCO ₃ Alkalinity	colonies Total coliform	ppm COD	ppm BOD	ppm T-PO ₄ -P
71-4099	1	7.0	4.	12.	250.	0.	2.	.11
00	2	6.8	4.	34.	175.	0.	1.	.14
01	2A	7.1	13.	39.		0.	1.	.18
02	3	7.2	4.	37.	375.	0.	3.	.55
	ppm T.S.	ppm T.N.V.S.	ppm T.S.S.	ppm T.S.N.V.S.	ppm organic Kjeldahl-N	ppm NO ₃ -N Filtered	ppm NO ₃ -N Filtered	ppm NH ₃ -N
71-4099	80.	36.	4.	0.	.18	.48	.01	.02
00	86.	38.	2.	0.	.20	.55	.02	.00
01	328.	208.	5.	0.	.00	33.60	.08	14.70
02	92.	42.	2.	0.	.30	.74	.05	.32

Notes:

Summarized by

Pat Lee

Date

1/5/72